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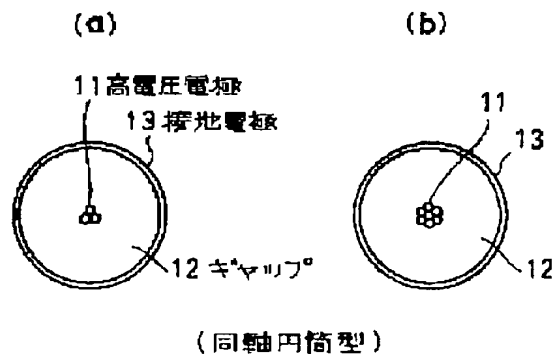
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TITLE : OZONE GENERATOR



ABSTRACT : PROBLEM TO BE SOLVED: To effectively produce ozone in a small electric power consumption, without mounting a dielectric substance on the ozone generator indispensable in silent discharge ozone generator as before.

SOLUTION: A cylindrical earth electrode 13 (SUS earth electrode tube), for example, is installed, via a gap 12, e.g. 18mm, coaxial outer periphery of the high voltage electrode 11 composed of bundle wires of a few wires having several mm of diameter. Between the electrodes 11 and 13 is loaded a pulse voltage having a sharp build-up and short pulse width, e.g. build-up time: 200nsec; pulse width 2μsec and frequency 1,000Hz. Thus an electric discharge is realized which has high electron energy and low molecular energy and ion energy, namely a nonequilibrium plasma discharge, free from the out break of streamer like discharge pole which have many streaming electrons without participating in the collision with oxygen molecules. This discharge is able to generate electrons necessary for the collision with oxygen molecules and ozone is produced effectively in a small power consumption.

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